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EXAMINER

ABRAMS, NEIL

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032377

Applicant(s)

Examiner

N. Abrams

Group Art Unit

2839

pw

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-28 is/are pending in the application.
- ☐ Of the above claim(s) 26-28 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-25 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2839

Restriction to are of the following is required under 35 USC 121.

Claims 1-25 drawn to a power socket, class 439,

Claims 26-28 drawn to a method of operating a device, class 333.

The inventions are distinct, each from the other because:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product could be used with only alternating current.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Gerves on December 15, 2003 a provisional election was made with traverse to prosecute the invention of I, claims 1-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 26-28 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Abstract, reference to following should be added. ^{//} Capacitor used may include plates that are vertically oriented relative to socket faces and capacitors may be located between power and ground contacts ^{or} ~~or~~ between two power contacts or two ground contacts. ^{//} "Other language could be used.

In spec note that features are disclosed but no specific purposes are set forth for their presence. Just why vertical plates are used and how the capacitors are to function and how they are connected between circuit elements is not disclosed. Capacitors connected between power and ground are known. Purpose of capacitors between power contacts or ground contacts is unclear. Purpose for location of power grounds at edges is also unclear.

These matters should be discussed in spec but without use of new matter. Arguments to these features must point out their purposes. Without specific purpose they may be considered obvious design matters.

Drawings objected to, in figs. 2A, 5, connections of capacitors to proper terminals should be schematically shown.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim 17 embedded capacitor with power and ground plates must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The individual parts but not the combination is shown. A new vertical view taken in fig. 2B through 30, 138, 32 is suggested to show a capacitor embedded in 140 and between contacts 30, 32.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

For claims 5, etc, reference to vertical capacitor is questioned. Only the plates are vertical.

Claims 2, 3, 5-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. ***.

These claims are based on non-enabling disclosure since no connections of capacitors to terminals are shown or discussed. In addition for the fig. 5 system purpose of capacitors between two powers or two grounds is unclear.

Claims 10, 11 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10, 11 terms the capacitor lacks antecedent basis, claim 23, seems to call for two powers at one edge two grounds at the other edge, however parent claim 17 calls for a capacitor with power and ground plates which would not be usable with the claim 23 arrangement.

Art Unit: 2839

Claims 1 and 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arisaka alone or in view of Sato, Lockhart, Tanizawa Biswas and Deftari. Arisaka discloses (figs 1, 3) a platform with power terminals 3 and I/o socket terminals 2, the I/o cross-section areas being smaller than those of the power pins see fig. 3. Arisaka, figs. 1,3 does not include ground terminals. Arisaka, fig. 5 at 4, Tanizawa at 22 and Deftari at 8 disclose use of ground pins. Obvious to use such type pins in Arisaka figs. 1-3 to help reduce cross talk. Should cross section areas feature be at issue, Tanizawa also discloses use of power pins thicker than I/O pins fig. 10A at 22, 14. Obvious to use same in Arisaka to enable use of high currents.

For claim 4, obvious to form Arisaka socket to include ground, power terminals at edges in view of Sato, fig. 8A at G, V and Deftari. This is standard arrangement of pads for external use. Use of two grounds at one edge, two powers at other does not define such modified Arisaka arrangement. Term "symmetrical" does not define over type pads that would be used ^{see} ~~se~~ Sato at G, V.

Claim 9 also met by Arisaka as applied above. For claims 5, 6, 7, 8, 10, 11 Arisaka lacks a capacitor. Capacitor use shown by Lockhart, Deftari and Biswas. Obvious to use a capacitor in Arisaka system to lower cross talk. Terms vertically oriented without reference to plates does not avoid rejection.

Claims 1, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arisaka in view of Andric.

Arisaka, figs. 1, 3 shows a platform with I/O sockets 2, but lacks a ground. Obvious to use power/grounds of Andric type at ³⁶ ~~36~~ A, B, C, D, fig. 3.
 7

Art Unit: 2839

The met claim 4 with 36B, D readable as along edge 32 and 36A, C along other edge.

Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freehauf in view of Lockhart Tanizawa Lin, Arisaka, Baudouin/~~Tanizawa, Lin, Arisaka, Baudouin~~, and Briones.

Freehauf, fig. 7, discloses a socket with planar surfaces, I/O pins 14E and power/ground terminals 13E, 13F and a capacitor 20. Freehauf lacks a power pin of larger size than the I/O pins and bumps and while the capacitor plates would be vertical lacks clear disclosure of same. Arisaka at 3 and Tanizawa at 22 use large size power pins, Lin uses bumps 2, and Lockhart at 37 and Briones at 80, fig. 3 show how capacitor plates are typically formed with plates parallel to faces of capacitor housing.

Obvious to apply those teachings to Freehauf, the large power pin being to handle high current, the bumps enable solder use the capacitor 20 plates when formed as is usual being vertical to faces of socket 11. For claim 14, note Lockhart capacitor 37. This is typical formation of capacitors.

For claims 15, Freehauf lacks power/ground and capacitor at two edges. Baudouin system fig. 7 includes power ground and capacitors at plural edges. Obvious to form Freehauf fig. 7 with A, B, 20 arrangement at both side edges. This would enable greater power or different power levels for the chip.

Claims 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freehauf in view of Lockhart, Briones and Baudouin.

Freehauf is described above. Obvious that capacitor 20 plates would be like those of Lockhart and Briones at 80 and would be vertically oriented.

Term embedded as broadly used in this case does not define over Freehauf arrangement with capacitor 20 in recess in socket body. Claims 19, 21, 22 define obvious matters of choice. Claims 23-25, obvious to form power and grounds with central capacitor on "both" side edges to increase voltages for the device in view of Baudoin, see fig. 7.

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freehauf in view of Arisaka, Andric, Baudouin and Tanizawa.


The patents are applied as discussed above for claims 12-16.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freehauf in view of Arisaka and Tanizawa. patents are applied as above.

Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lockhart in view of Johnsen and Bajorek.

Lockhardt discloses a socket 17 with power and ground terminals col. 3, line 26 and an embedded capacitor 37. The capacitor plates are not vertical. Johnsen and Bajorek show systems with vertical capacitor plates, obvious to use such plates in Lockhart to save space as discussed by Johnson.

Any inquiry concerning this communication should be directed to Neil Abrams at telephone number (571)272-2089.


NEIL ABRAMS
EXAMINER
ART UNIT 322